Docket No.: TIP-0052USPCT

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ABSTRACT

PIPERIDINE-AMINO-BENZIMIDAZOLE DERIVATIVES AS INHIBITORS OF RESPIRATORY SYNCYTIAL VIRUS REPLICATION

The present invention concerns piperidine-amino-benzimidazoles having inhibitory activity on the replication of the respiratory syncytial virus and having the formula

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$$Q = N \xrightarrow{(CH_2)_t} N \xrightarrow{R^5} N \xrightarrow{R^{2b}} R^{3a}$$

$$(I)$$

their prodrugs, N-oxides, addition salts, quaternary amines, metal complexes and stereochemically isomeric forms wherein Q is C₁₋₆alkyl optionally substituted with 10 trifluoromethyl, C₃₋₇cycloalkyl, Ar², hydroxy, C₁₋₄alkoxy, C₁₋₄alkylthio, Ar²-oxy-, Ar²-thio-, Ar²(CH₂)_noxy, Ar²(CH₂)_nthio, hydroxycarbonyl, aminocarbonyl, C₁₋₄alkylcarbonyl, Ar²carbonyl, C₁₋₄alkoxycarbonyl, Ar²(CH₂)_ncarbonyl, aminocarbonyloxy, C₁₋₄alkylcarbonyloxy, Ar²carbonyloxy, Ar²(CH₂)_ncarbonyloxy, C₁₋₄alkoxycarbonyl(CH₂)_noxy, mono- or di(C₁₋₄alkyl)aminocarbonyl, mono- or di(C₁₋₄alkyl)-15 aminocarbonyloxy, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl or a heterocycles selected from the group consisting of pyrrolidinyl, pyrrolyl, dihydropyrrolyl, imidazolyl, triazolyl, piperidinyl, homopiperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, 1-oxo-thiomorpholinyl, 1,1-dioxothiomorpholinyl, 20 pyridyl and tetrahydropyridyl, wherein each of said heterocycle may optionally be substituted with oxo or C₁₋₆alkyl; G is a direct bond or optionally substituted C₁₋ $_{10}$ alkanediyl; R^1 is Ar^1 or a monocyclic or bicyclic heterocycle; one of R^{2a} and R^{3a} is C₁₋₆alkyl and the other one of R^{2a} and R^{3a} is hydrogen; in case R^{2a} is different from hydrogen then R^{2b} is hydrogen or C₁₋₆alkyl, and R^{3b} is hydrogen; in case R^{3a} is different from hydrogen then R^{3b} is hydrogen or C₁₋₆alkyl, and R^{2b} is hydrogen; t is 1, 2 or 3; Ar¹ 25 is phenyl or substituted phenyl; and Ar² is phenyl or substituted phenyl. It further concerns their preparation and compositions comprising them, as well as their use as a medicine.